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a pharmaceutically acceptable carrier, wherein the cancer associated antigen is a fragment of a cancer associated antigen precursor encoded by a nucleic acid molecule comprising a nucleic acid molecule selected from the group consisting of (a) nucleic acid molecules which hybridize under stringent conditions to a molecule consisting of a nucleic acid sequence as set forth as SEQ ID NO:23 and which codes for a cancer associated antigen precursor, (b) nucleic acid molecules that differ from the nucleic acid molecules of (a) in codon sequence due to the degeneracy of the genetic code, and (c) complements of (a) or (b).

D² 19. (Amended) The pharmaceutical preparation of claim 15, wherein the agent is selected from the group consisting of an isolated nucleic acid operably linked to a promoter for expressing the isolated polypeptide, and a host cell expressing the isolated polypeptide.

D³ 41. (Amended) A pharmaceutical composition comprising an isolated nucleic acid molecule selected from the group consisting of (a) nucleic acid molecules which hybridize under stringent conditions to a molecule consisting of a nucleic acid sequence as set forth as SEQ ID NO:23 and which codes for a cancer associated antigen precursor, (b) nucleic acid molecules that differ from the nucleic acid molecules of (a) in codon sequence due to the degeneracy of the genetic code, (c) complements of (a) or (b), and (d) fragments of (a), (b) or (c), which code for a polypeptide which, or a portion of which, binds an MHC molecule to form a complex recognized by an autologous antibody or lymphocyte, and a pharmaceutically acceptable carrier.

D⁴ 54. (Amended) An isolated nucleic acid molecule comprising a nucleic acid molecule selected from the group consisting of (a) nucleic acid molecules which hybridize under stringent conditions to a molecule consisting of a nucleic acid sequence as set forth as SEQ ID NO:23, and which codes for a cancer associated antigen precursor, (b) nucleic acid molecules that differ from the nucleic acid molecules of (a) in codon sequence due to the degeneracy of the genetic code, and (c) complements of (a) or (b).

D⁵ 56. (Amended) An isolated nucleic acid molecule selected from the group consisting of (a) a fragment of a nucleic acid molecule having a nucleotide sequence as set forth as SEQ ID NO:23, of sufficient length to represent a sequence unique within the mouse or human

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genomes, and which identifies it as a nucleic acid encoding a cancer associated antigen precursor,

(b) complements of (a),

provided that the isolated nucleic acid molecule includes a sequence of contiguous nucleotides which is not identical to the nucleic acid sequence represented by GenBank accession number AI024421.

D6 ⁶ 62. (Amended) An expression vector comprising a nucleic acid molecule of claim 15 and a nucleic acid encoding a MHC molecule.

76. (Amended) A kit for detecting the presence of the expression of a cancer associated antigen precursor comprising

D7 a pair of isolated nucleic acid molecules each of which consists essentially of a molecule selected from the group consisting of (a) a 12-32 nucleotide contiguous segment of the nucleotide sequence of a nucleic acid molecule which hybridizes under stringent conditions to a molecule consisting of a nucleic acid sequence as set forth as SEQ ID NO:23 and which codes for a cancer associated antigen precursor, (b) nucleic acid molecules that differ from the nucleic acid molecules of (a) in codon sequence due to the degeneracy of the genetic code and (c) complements of (a), wherein the contiguous segments are non-overlapping.

Please add the following new claims.

122. (New) The pharmaceutical preparation of claim 15, further comprising an adjuvant.

123. (New) The pharmaceutical preparation of claim 19, further comprising an adjuvant.

D8 124. (New) The pharmaceutical preparation of claim 41, further comprising an adjuvant.

125. (New) The pharmaceutical preparation of claim 15, wherein the agent is a cell expressing the nucleic acid molecule and wherein the cell is nonproliferative.

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126. (New) The pharmaceutical preparation of claim 15, wherein the agent is a cell expressing the nucleic acid molecule and wherein the cell expresses a MHC molecule.

127. (New) The pharmaceutical preparation of claim 15, wherein the agent comprises at least two, at least three, at least four or at least five nucleic acid molecules, each coding for a different polypeptide comprising a different cancer associated antigen, wherein at least one of the nucleic acid molecules is a nucleic acid molecule selected from the group consisting of (a) nucleic acid molecules which hybridize under stringent conditions to a molecule consisting of a nucleic acid sequence as set forth as SEQ ID NO:23 and which codes for a cancer associated antigen precursor, (b) nucleic acid molecules that differ from the nucleic acid molecules of (a) in codon sequence due to the degeneracy of the genetic code, and (c) complements of (a) or (b).

128. (New) The pharmaceutical preparation of claim 126, wherein the cell expresses one or both of the nucleic acid molecule and the MHC molecule recombinantly. *was not*

129. (New) The pharmaceutical preparation of claim 126, wherein the cell is nonproliferative. *was not*

130. (New) The pharmaceutical composition of claim 41, wherein the isolated nucleic acid molecule comprises at least two isolated nucleic acid molecules coding for two different polypeptides, each polypeptide comprising a different cancer associated antigen.

131. (New) The pharmaceutical composition of claim 41 further comprising an expression vector comprising the isolated nucleic acid molecule operably linked to a promoter.

132. (New) The pharmaceutical composition of claim 41 further comprising a host cell, wherein the host cell recombinantly expresses the isolated nucleic acid molecule.

133. (New) The isolated nucleic acid molecule of claim 56, wherein the fragment has a size selected from the group consisting of at least: 8 nucleotides, 10 nucleotides, 12 nucleotides, 14 nucleotides, 16 nucleotides, 18 nucleotides, 20 nucleotides, 22 nucleotides, 24 nucleotides, 26